



# **Missouri Department of Natural Resources**

## **Incident Summary Report**

**Fiscal Year 2008**



**Environmental Emergency Response  
Field Services Section**

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**Environmental Emergency Response  
Field Services Section**



## **Environmental Emergency Response Field Services Section Incident Summary Report Fiscal Year 2008**

The Fiscal Year 2008 Environmental Emergency Response Field Services Section (EER) Incident Summary Report was generated using data taken by the EER Duty Officers through the department's 24-hour emergency spill notification telephone line (573-634-2436). This information is entered into the Missouri Environmental Emergency Response Tracking System (MEERTS II) database.

Following is the number of incidents reported to and managed by EER Duty Officers on the 24-hour emergency spill notification telephone line.

<b>Regional Office</b>	<b>Kansas City</b>	<b>St. Louis</b>	<b>Southwest</b>	<b>Northwest</b>	<b>Southeast</b>	<b>Total</b>
<b>Methamphetamine Incidents</b>	<b>59</b>	<b>431</b>	<b>137</b>	<b>26</b>	<b>19</b>	<b>672</b>
<b>EER Incidents</b>	<b>377</b>	<b>336</b>	<b>256</b>	<b>222</b>	<b>230</b>	<b>1421</b>
<b>Grand Total</b>	<b>436</b>	<b>767</b>	<b>393</b>	<b>248</b>	<b>249</b>	<b>2093</b>

For every EER incident reported, an average of 6.4 telephone calls (incoming/outgoing) are required to manage the cleanup efforts, make notifications, address media inquiries, and/or provide technical assistance to local emergency response personnel. For Fiscal Year 2008 this equates to over 13,000 calls.

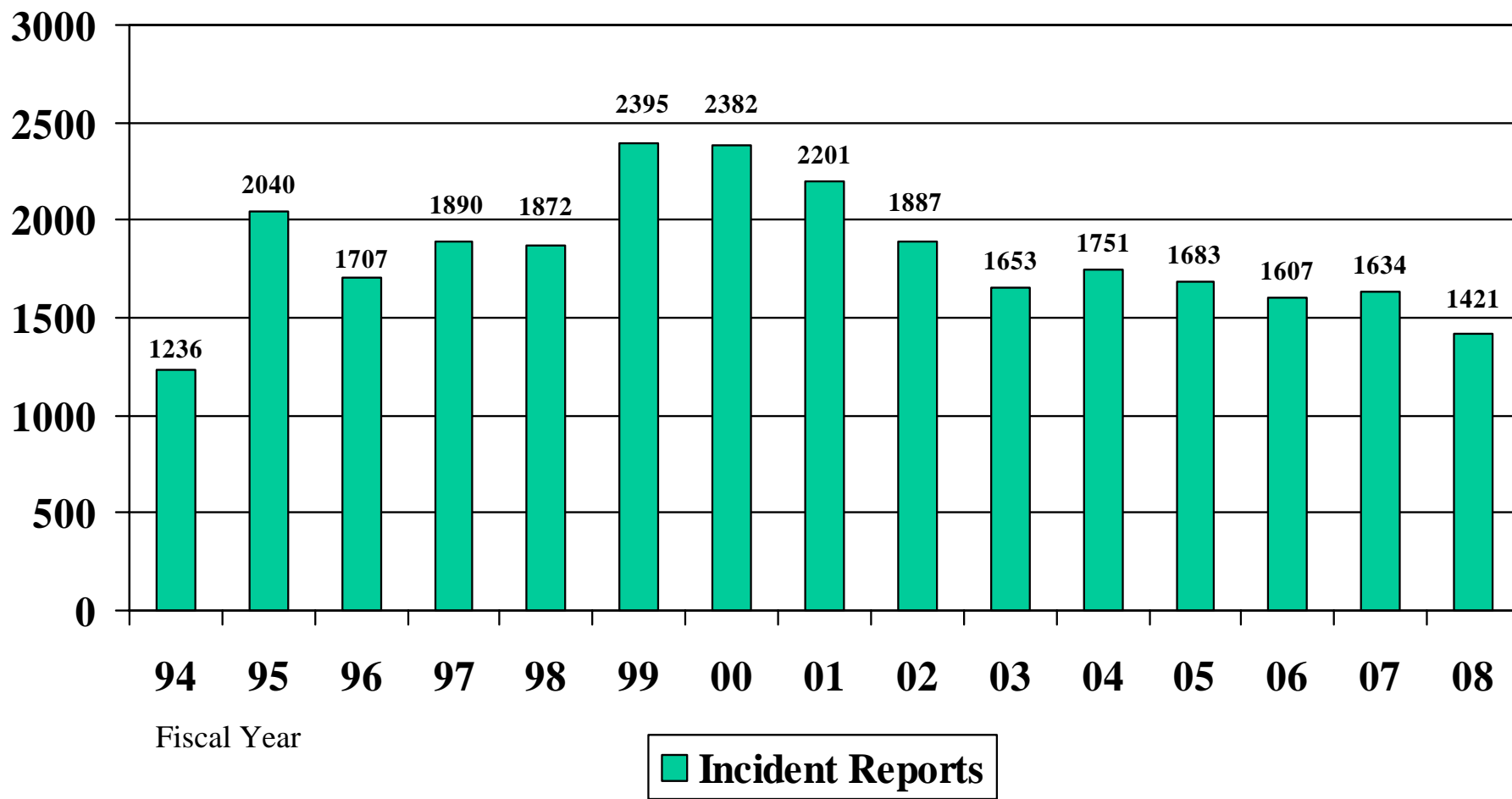
# Incident Report Information



Environmental Emergency Response  
Field Services Section

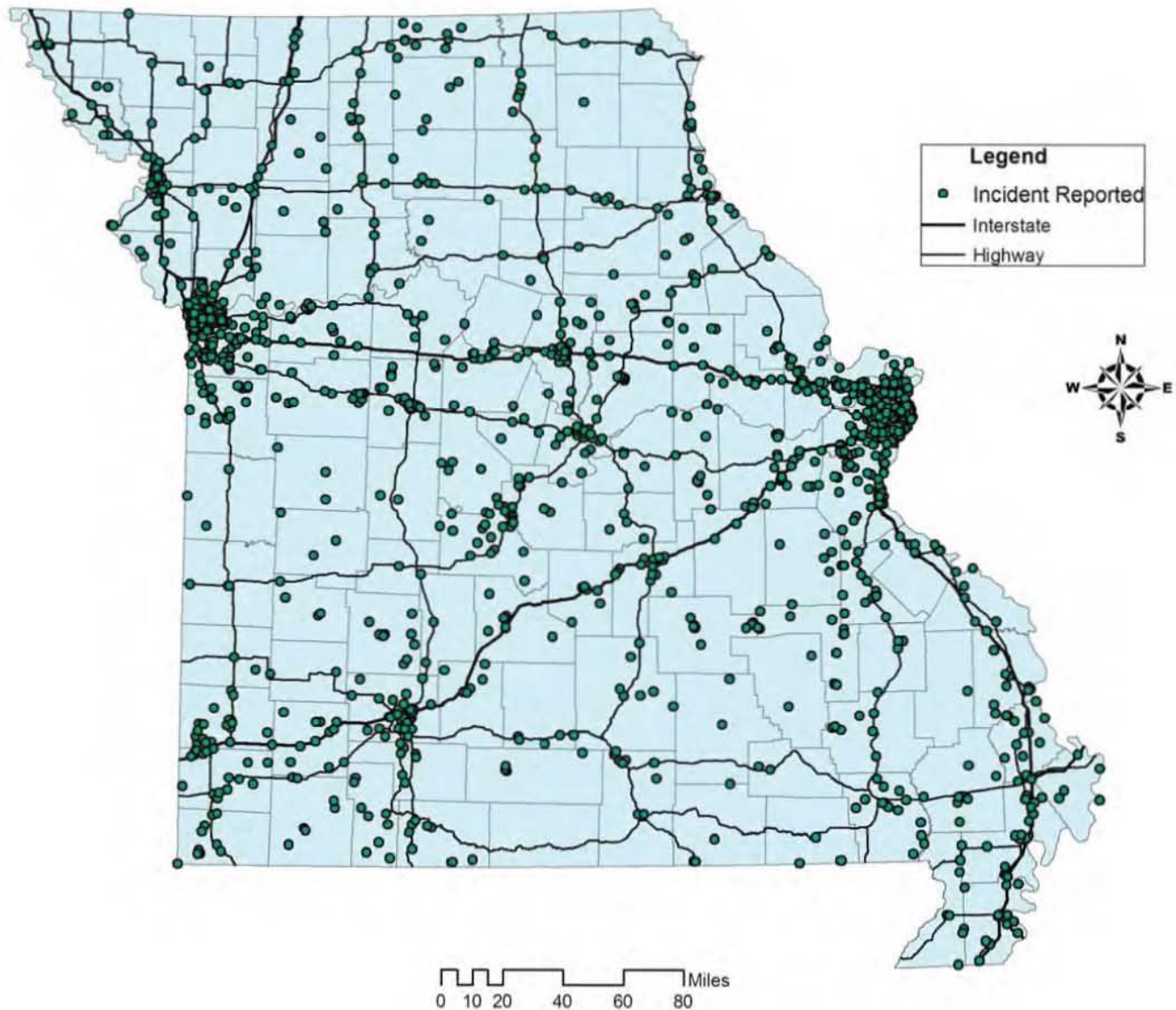


# Incident Reports



A review of the data indicates the reduction in incident reports from FY 07 to FY 08 may be attributed to reporting procedures for air pollutant concerns, the lack of department inspectors to provide oversight at above ground and underground storage tank facilities, education and outreach, improved management and control by industry, and reporting procedures for environmental concerns to regional offices.

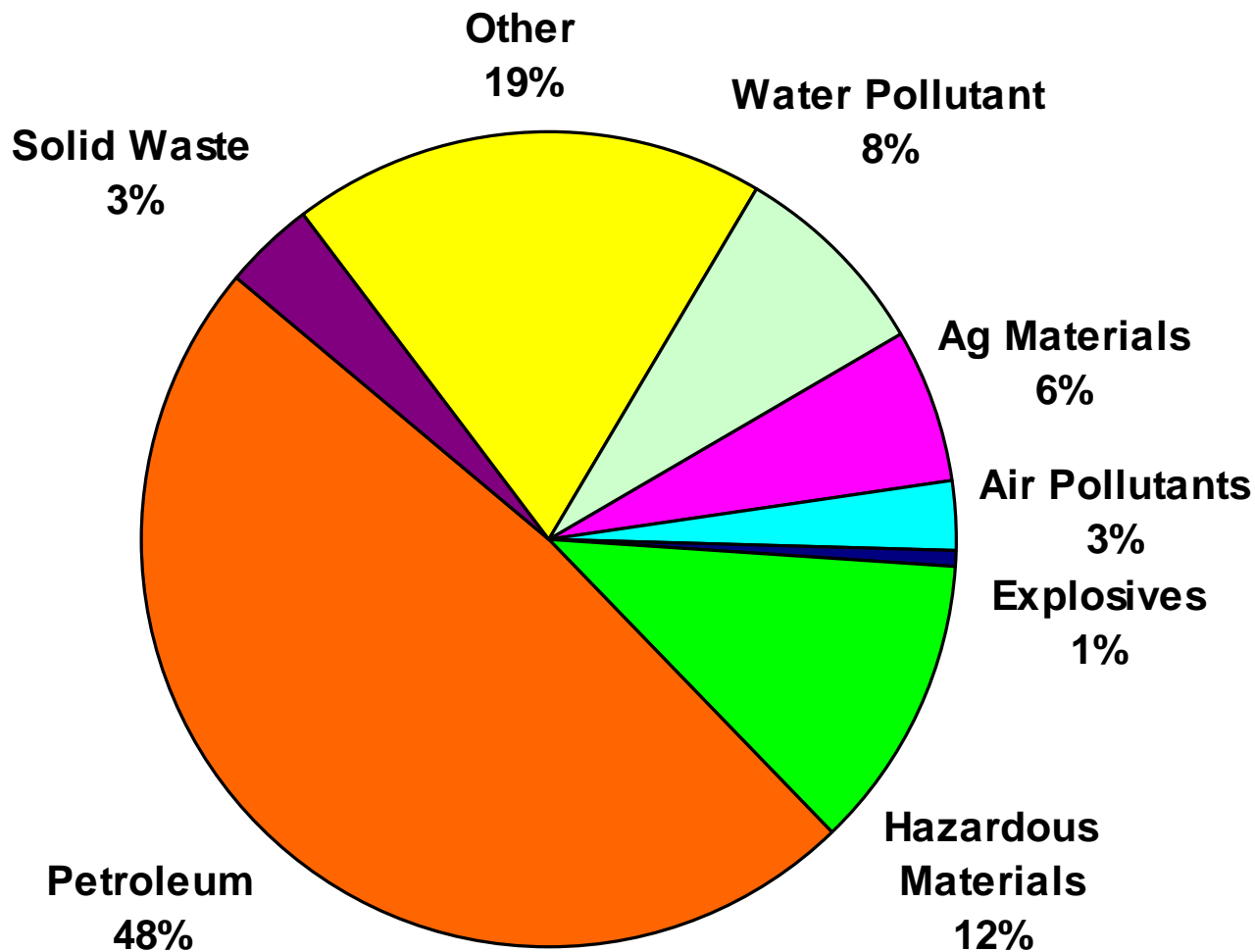
# FY '08 EER Incidents Reported





Fiscal Year 08

# Materials Released

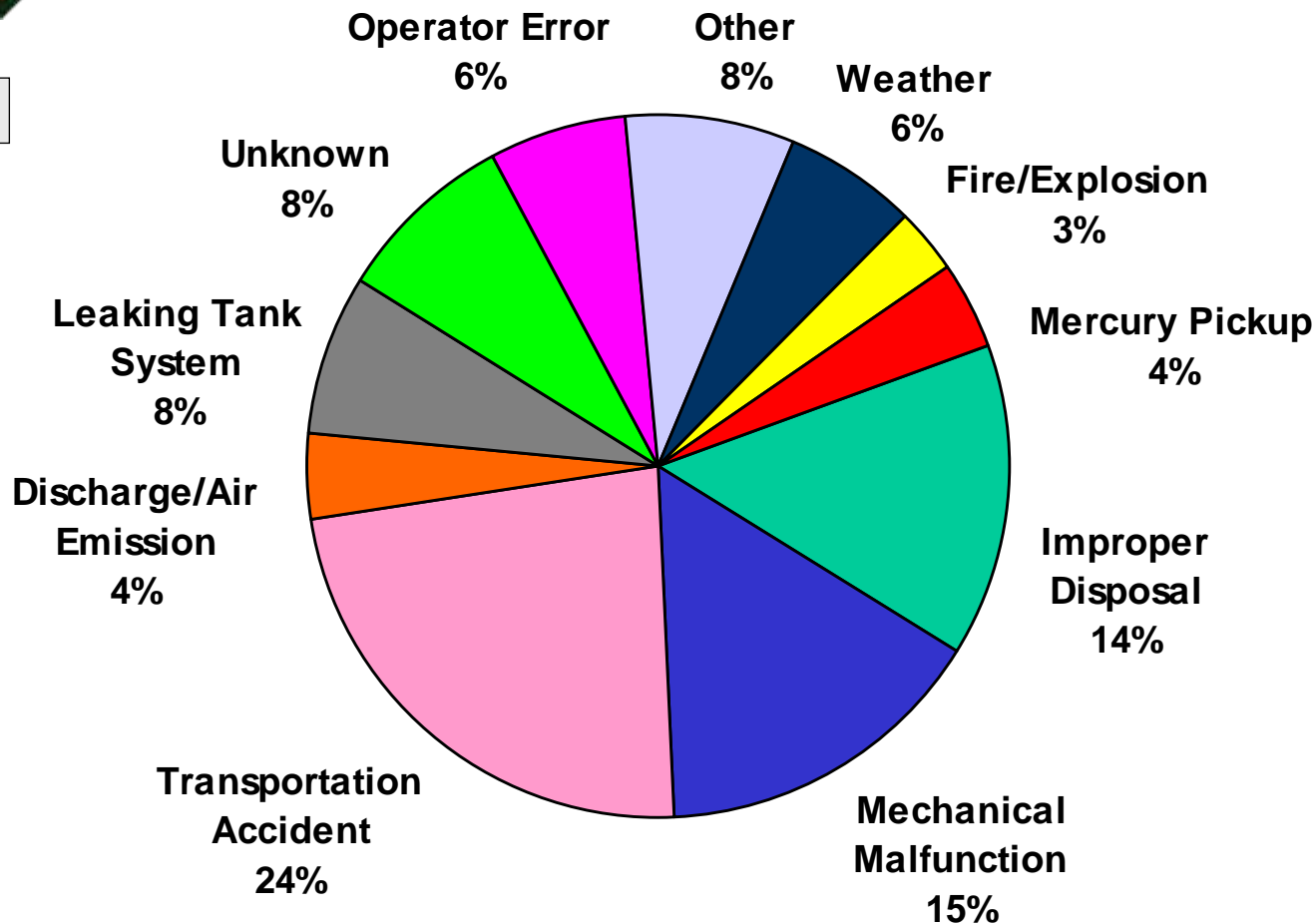


Excludes drug lab incidents. See Incident Category Information - Materials for types of materials released in each category included on the pie chart.



Fiscal Year 08

# Incident Causes

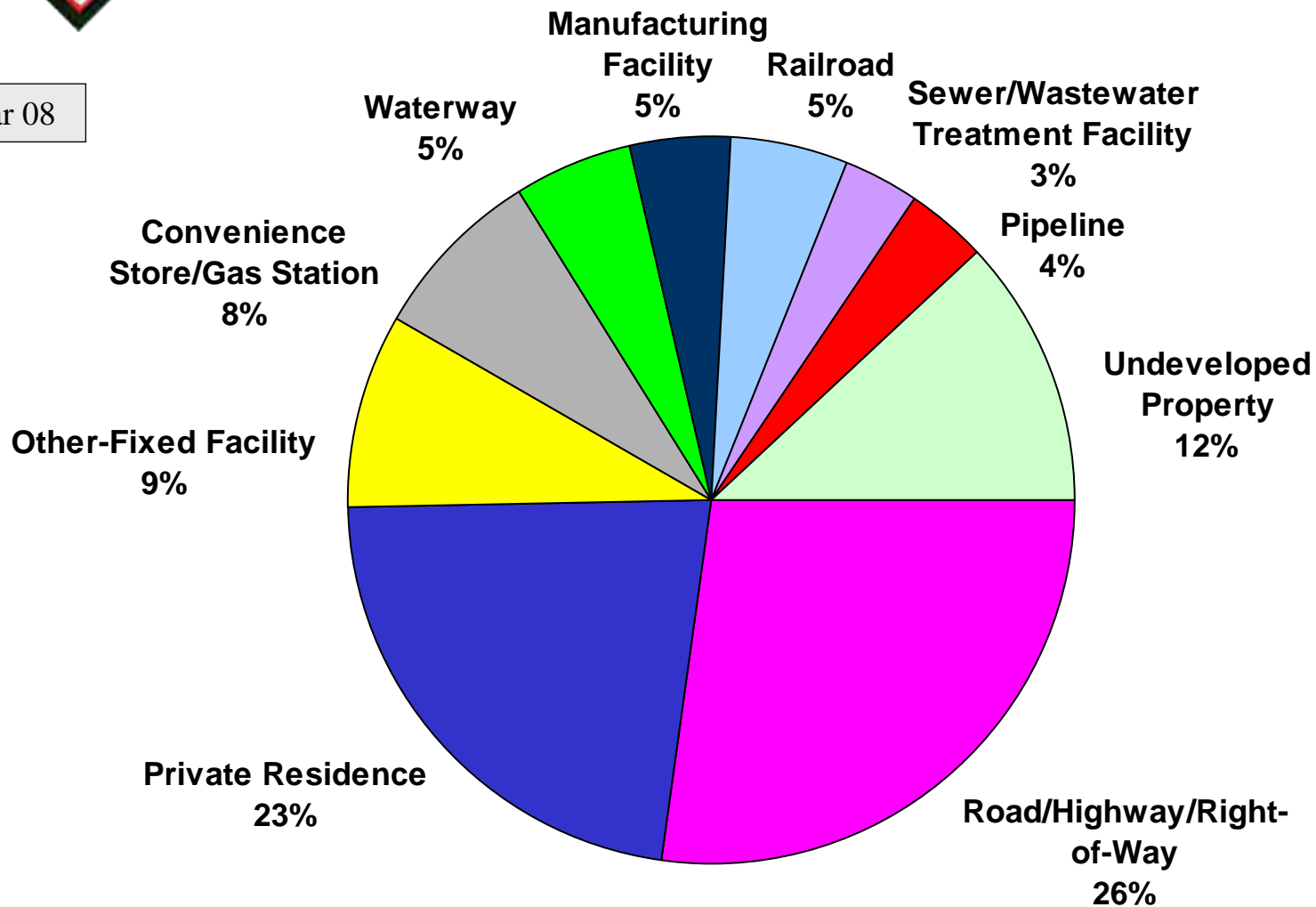


Excludes drug lab incidents. "Unknown" includes incidents inconclusive information that does not fit into a specific cause (e.g. discoloration in a waterway). "Other" includes a variety of causes (e.g. household hazardous waste, school lab chemicals, seepage/leachate, intentional act/vandalism, etc.). See Incident Category Information - Incident Cause for causes of materials released in each category included on the pie chart.



# Property Use/Release Location

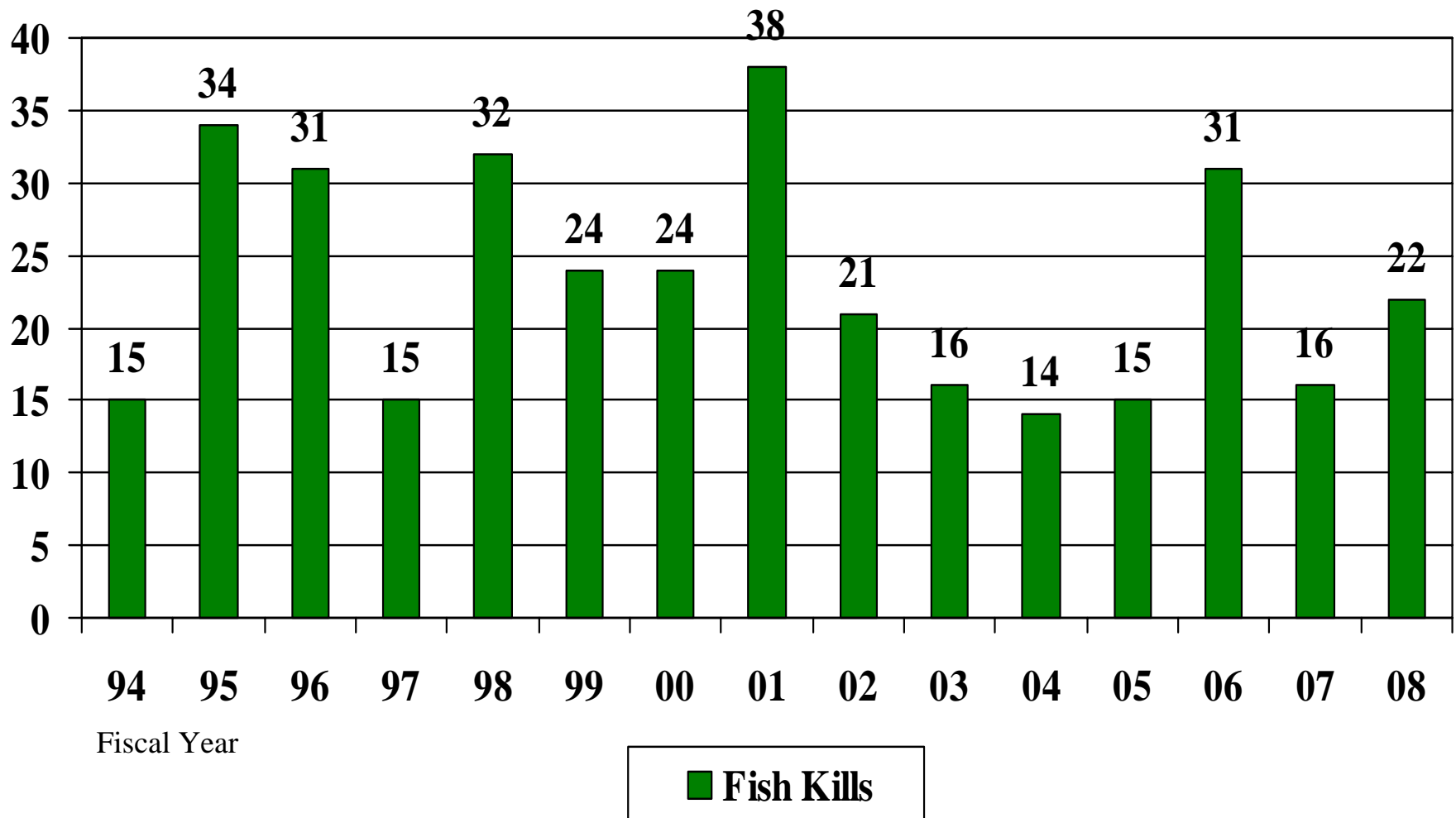
Fiscal Year 08



Excludes drug lab incidents. See Incident Category Information – Property Use for types of locations where materials were released in each category included on the pie chart.

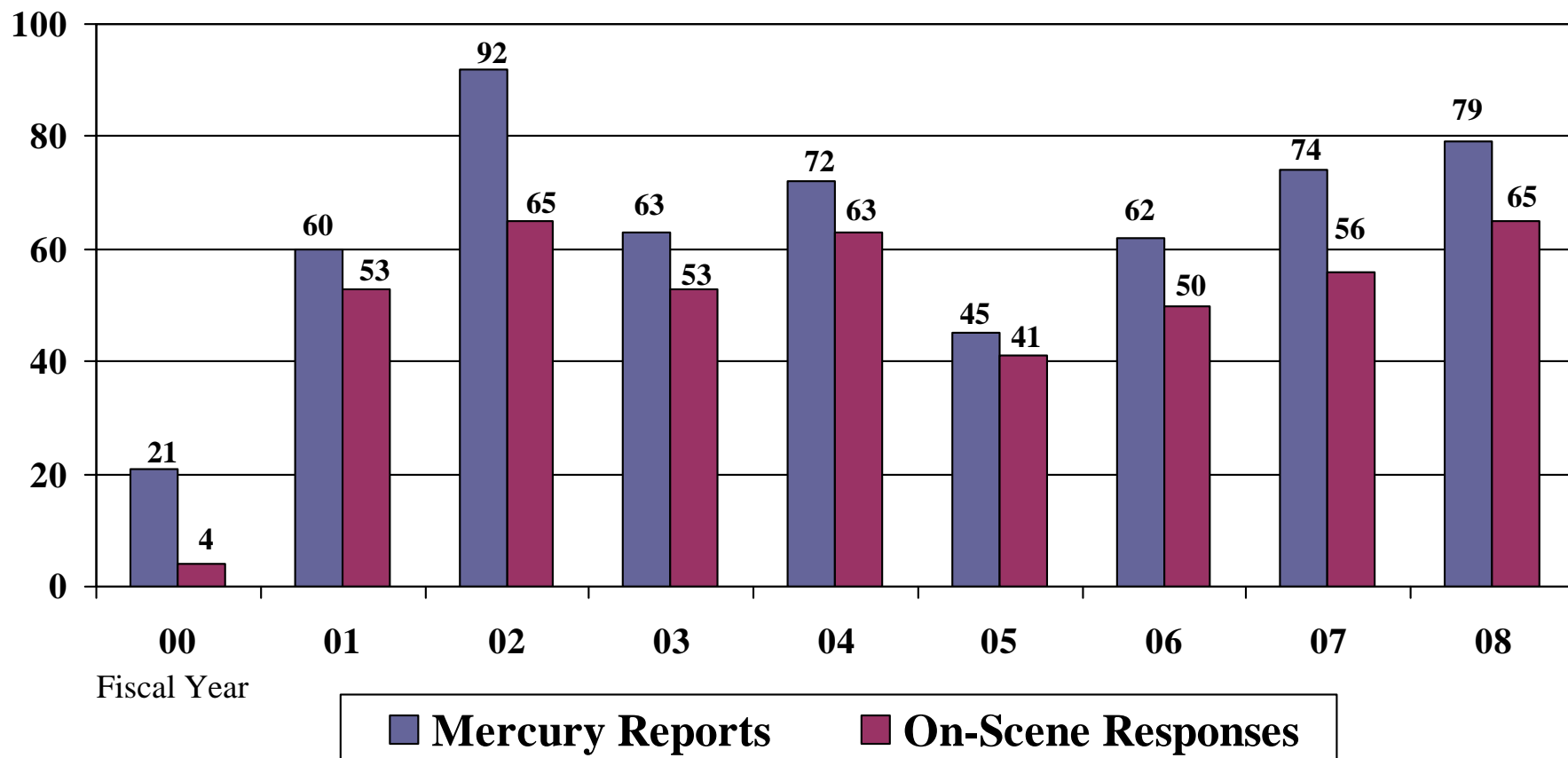


# Fish Kills





# Mercury Reports/On-Scene Responses



The majority of mercury reports include releases from broken thermostat switches, broken household and lab thermometers, and requests from private citizens to recycle elemental mercury. On-Scene responses include air monitoring, small quantity cleanups, and collection of elemental mercury and mercury containing devices for recycling.

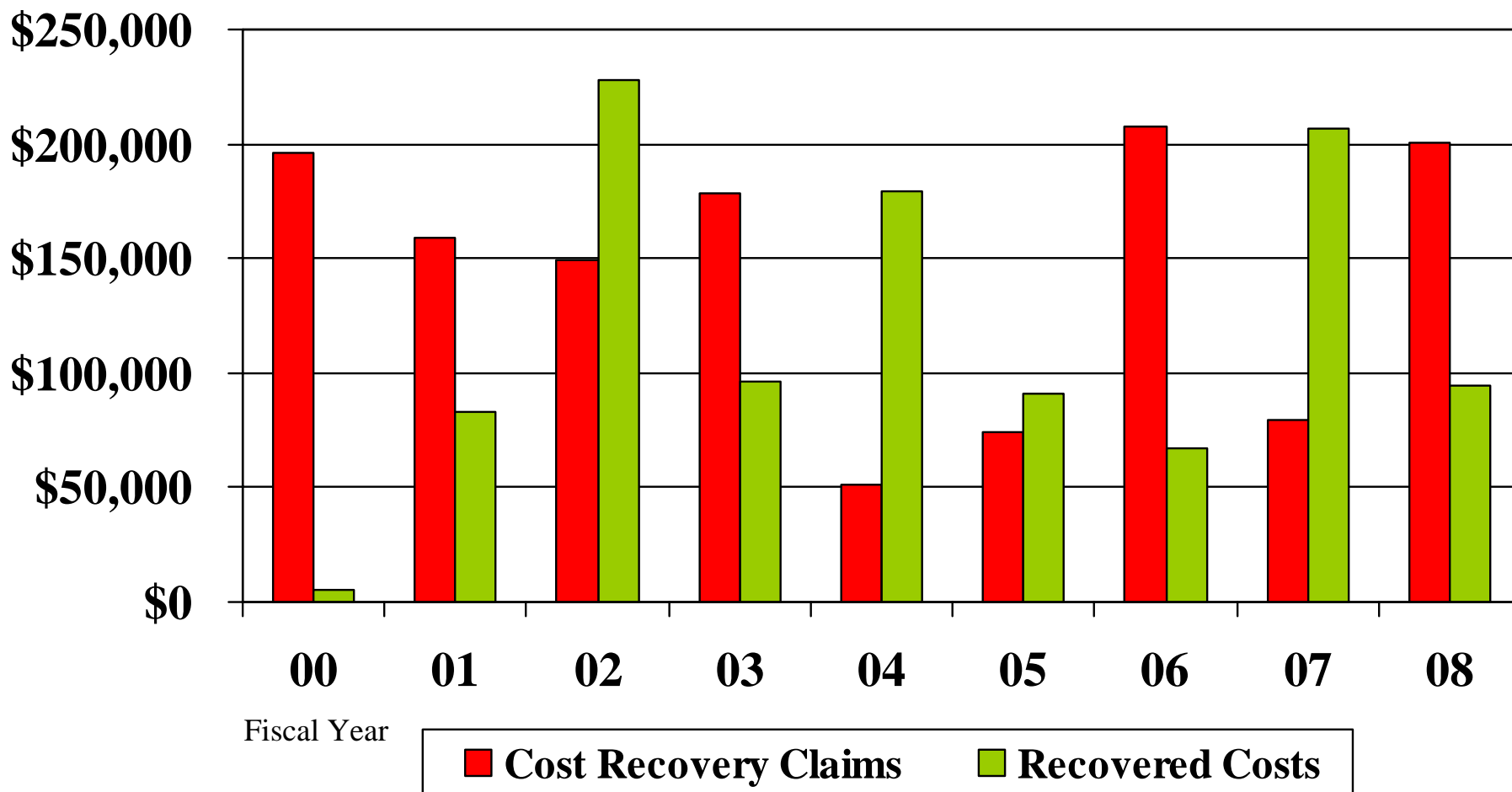
# Cost Recovery Information



Environmental Emergency Response  
Field Services Section



# Cost Recovery Claims/Recovered Costs



The claim amount for FY 07 is \$79,444.16. The recovered amount for FY 07 is \$206,918.37.  
A receivable billed in FY 06 was received in FY 07 (Oil Pollution Act Fund Claim) for \$118,411.74.

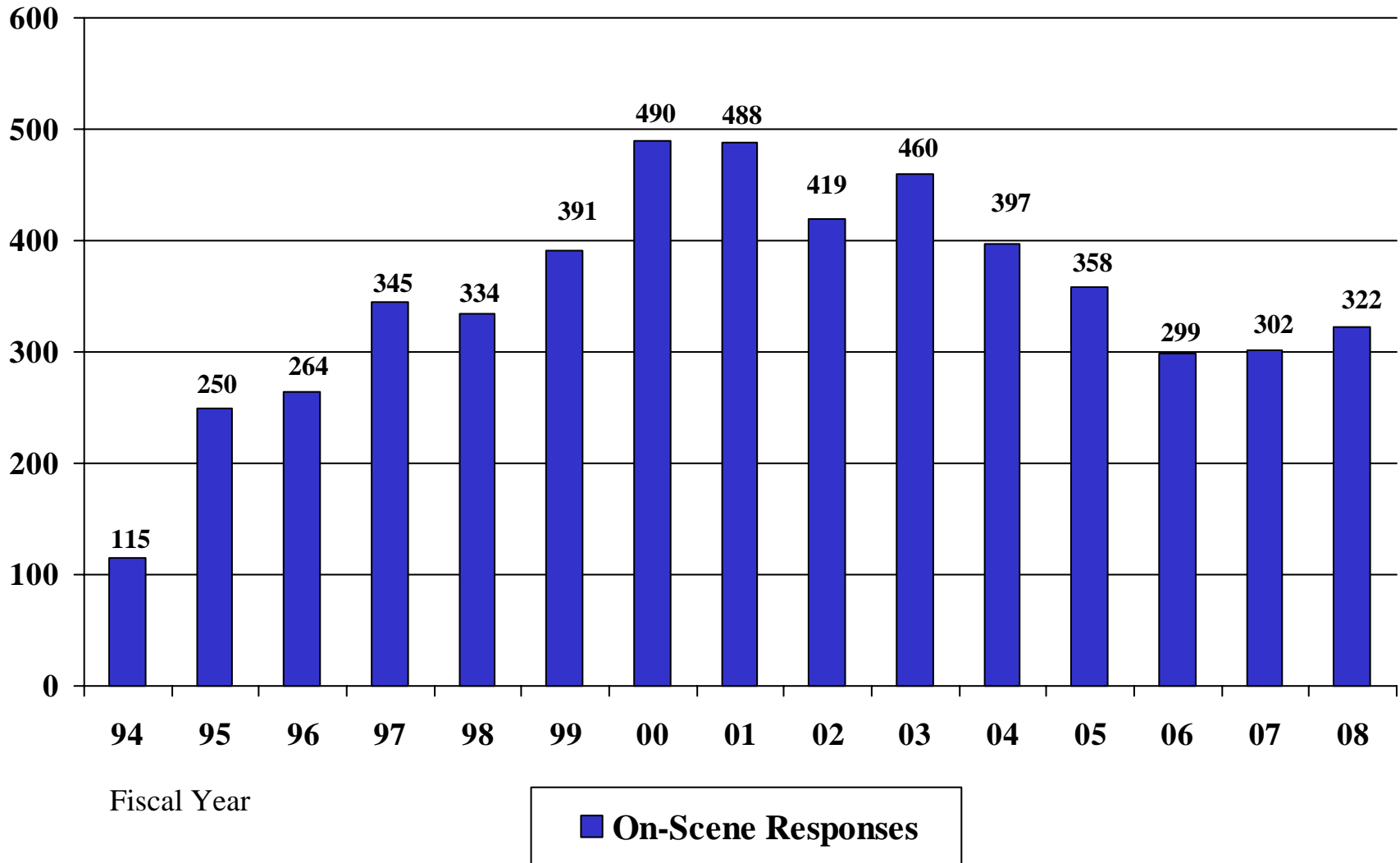
# On-Scene Responses



Environmental Emergency Response  
Field Services Section

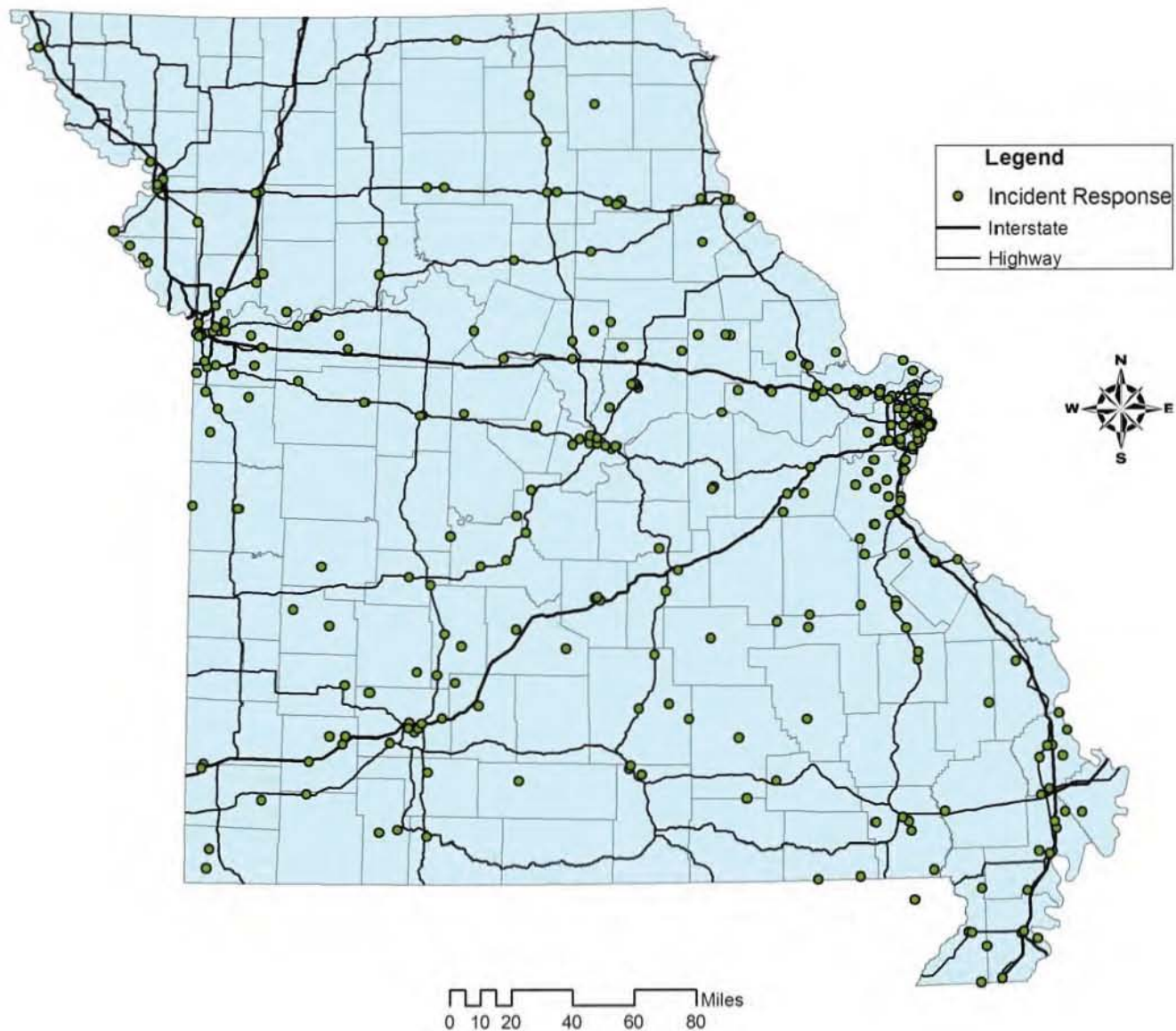


# On-Scene Responses





# FY '08 EER Incidents On Site Responses





## **Butler County**

**A battery of field tests are conducted after an envelope containing white powder is discovered in Poplar Bluff**



## **Dunklin County**

**Glycerin laced with methanol was improperly disposed from a biodiesel production facility resulting in an extensive fish kill**



## **Jefferson County**

**Over 5,000 gallons of gasoline and ethanol spilled into a losing stream after a tractor tanker crashed near House Springs**



## **Gasconade County**

**Emergency responders work to recover orphaned containers  
after severe spring flooding on the Gasconade River**



## **Miller County**

**A fire at a mercury recycling facility results in damage to a warehouse and a release of mercury to the environment**





## **Montgomery County**

**A pipeline transporting crude oil ruptured spraying nearby trees and pouring into a landowner's pond**



**Montgomery County**  
**Drum skimmers are used to recover crude oil from a pond**  
**north of Bellflower**



## **Cole County**

**A tractor tanker laden with gasoline and ethanol  
crashes and burns on Highway 54 in Jefferson City**

# Incident Category Information



Environmental Emergency Response  
Field Services Section



## MATERIAL

<b><u>Material</u></b>	<b><u>Number of Reports</u></b>
Agriculture (pesticide, animal waste, processed oil, foodstuff, anhydrous ammonia, animal feed, etc.)	94
Air Pollutant (asbestos, freon, chlorine, odor, smoke, etc.)	42
Clandestine Drug Lab	671
Explosives	9
Homeland Security	1
Petroleum/Oil (natural gas, coal, fuel oil, diesel fuel, jet fuel, gasoline, etc.)	732
Hazardous Materials (corrosive, mercury, ethylene glycol, solvents, paint, radiological, school lab chemicals, RCRA waste, etc.)	177
Solid Waste (shingles, rubbish, medical waste, waste tires, etc.)	53
Undetermined/Other (unknown, fire water runoff, etc.)	287
Water Pollutant (sewage, algae bloom, silt, dye trace, non-CAFO runoff, etc.)	123



## INCIDENT CAUSE

<b><u>Incident Cause</u></b>	<b><u>Number of Reports</u></b>
Confiscated Drug Lab Materials	672
Discharge/Air Emission	52
Fire/Explosion	42
Homeland Security Threat	3
Improper Disposal	202
Intentional Act/Vandalism	22
Leaking Tank System	
(Aboveground Storage Tank)	19
(Underground Storage Tank)	86
(Aboveground & Underground Storage Tank)	1
Mechanical Malfunction/Failure	215
Mercury Pickup	56
Operator Error	
(Open Valve)	4
(Other)	64
(Overfill)	21
Ordnance Destroyed	9
Other	53
Pipeline Release	18
Railroad Accident	43
School Lab Chemicals	11
Seepage/Leachate	11
Unknown/Undetermined	117
Vehicular Accident	
(Commercial)	215
(Private)	37
Watercraft Accident	
(Commercial)	1
(Private)	4
Weather Related	87



## PROPERTY USE

(Excludes Drug Labs)

<b><u>Property Use</u></b>	<b><u>Number of Reports</u></b>
Abandoned Property	16
Agricultural Facility	
(Ag/Coop)	9
(Farming Operation (non-CAFO))	9
(Unknown/Other)	7
Aircraft/Airport	8
Bulk Chemical Facility	6
Bulk Petroleum Facility	8
Concentrated Animal Feeding Operation	
(Swine)	13
Convenience Store/Gas Station	142
Distribution Facility	16
Dry Cleaner	
(Current)	1
Educational Facility	40
Health Care Facility	13
Manufacturing Facility	83
Military Facility	9
Mining Facility	2
Other - Fixed Facility	158
Pipeline/Pump Station	67
Power Plant	5
Private Residence	411
Public Property	25
Railroad/Railyard	94
Retail Facility	29
Road/Highway/ROW	495
Salvage/Junk Yard	15
Sewer/Wastewater Treatment Facility	63
Solid Waste Facility	1
Transformer/Substation	15
Undeveloped Property	217
Water Line/Water Treatment Facility	21
Water/Waterway/Marina	
(Commercial Watercraft)	11
(Marina)	7
(Private Watercraft)	7
(Unknown/Other)	71

# Outreach/Training



Environmental Emergency Response  
Field Services Section



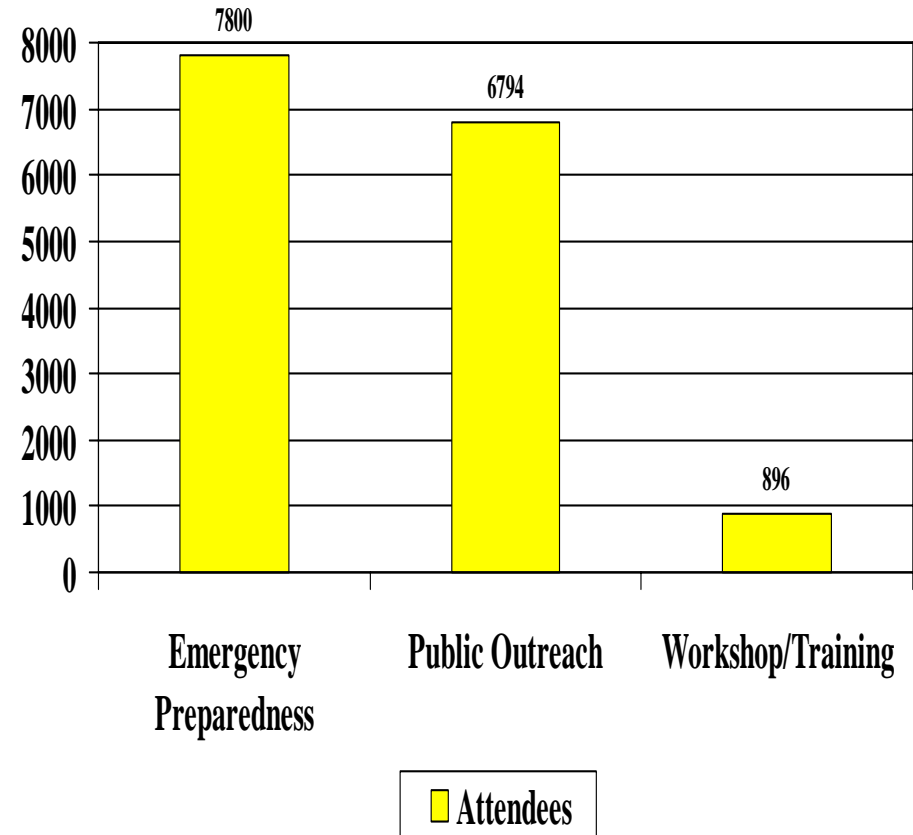
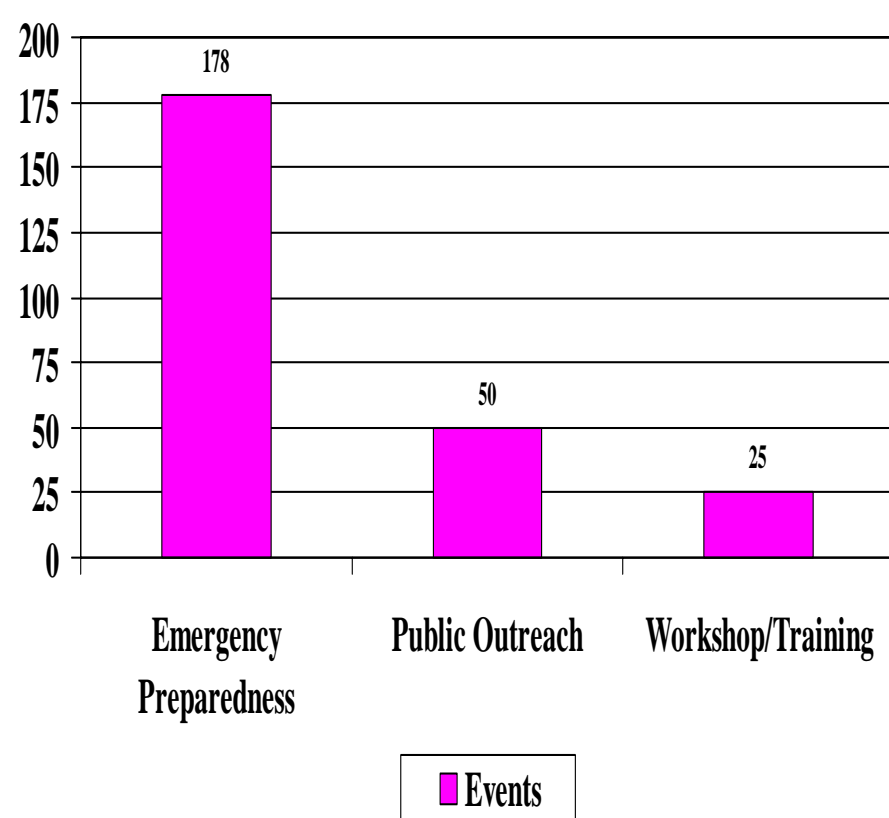
# Outreach/Training

- Personnel regularly participate in and attend a wide variety of events and provide training throughout the state every year. Spending time educating children, participating on committees, training and exercising with local, state and federal officials, and attending community events all pay great dividends. Examples of events include:
  - Local Emergency Planning Committees (LEPC)
  - Regional Homeland Security Oversight Committees (RHSOC)
  - Homeland Security Regional Response System (HSRRS) Executive Committee
  - Hazardous Materials/Homeland Security Exercises
  - Missouri State Highway Patrol Recruit and Communications Training
  - Transportation Community Awareness and Emergency Response Committee (TRANSCAER)
  - Center for Safe Schools Workgroup
  - Community Safety Days
  - Missouri State Fair
  - Hazardous Materials Training
  - State Emergency Management Agency Conferences
  - Spills of National Significance Drill
  - Earth Day
  - Pipeline Association of Missouri (PAM) Meetings/Conferences
  - Missouri Public Private Partnership (MOP3)
  - Upper Mississippi River Basin Association Meetings/Exercises
  - Agro Terrorism Meetings
  - Biodiesel National Conference
  - Career Fairs



# Outreach/Training

Fiscal Year 08



Staff participated in a total of 241 events reaching approximately 15,490 individuals.



### Important Note

- Notification to DNR does not mean that a cleanup will be initiated by DNR
- Spiller's responsibility
- Important to communicate that to any spiller, especially out-of-state responsible parties
- Encourage spiller to contact DNR



**Environmental Emergency Response roles and responsibilities are discussed with a new recruit class at the Missouri State Highway Patrol Training Academy**



**Environmental Emergency Staff participate in a federal civil support team exercise in St. Louis County**



**A State On-Scene Coordinator discusses details of an action plan with Linn County emergency responders at a petroleum tank spill exercise**

# Methamphetamine Lab Information



Environmental Emergency Response  
Field Services Section



# Methamphetamine Lab Information

- As methamphetamine use and production escalated in the early 1990's, law enforcement began requesting the service of Environmental Emergency Response to assist with the management and control of seized and abandoned clandestine drug lab chemicals and hazardous waste. With the support and financial assistance of the legislature and other local, state and federal agencies, the Environmental Emergency Response Section developed and administers the Clandestine Drug Lab Collection Station Program, the Supplies and Equipment Distribution Initiative and the Training Initiative.

- Clandestine Drug Lab Collection Station Program

Currently, collection stations are sited at 19 locally operated agencies throughout Missouri.

Since October 1998, 11,303 methamphetamine labs have been processed accounting for 438,020 pounds of solid waste, hazardous waste and other debris.

- Supplies and Equipment Distribution Initiative

Items are provided at no cost to law enforcement agencies so that they may safely enter and dismantle or otherwise respond to meth lab incidents in order to properly manage clandestine drug lab chemicals.

Supply items provided include chemical protective coveralls, gloves and boot covers, overpacks, pH paper, safety glasses and goggles, transportation labels, sample bottles, absorbent material, etc.

Equipment items provided include air monitoring devices (Drager pumps/colormetric tubes, photoionization detector and 4-gas meter), air-purifying respirators and cartridges, and self-contained breathing apparatus.

- Training Initiative

A variety of safety and hazardous materials training courses are offered that focus on methamphetamine-related issues.

Training courses offered include:

- 40-hour Hazardous Waste and Emergency Response for Methamphetamine Laboratories

- 8-hour Hazardous Waste and Emergency Response for Methamphetamine Laboratories Re-certification

- 24-hour Site Safety Officer for Methamphetamine Laboratories

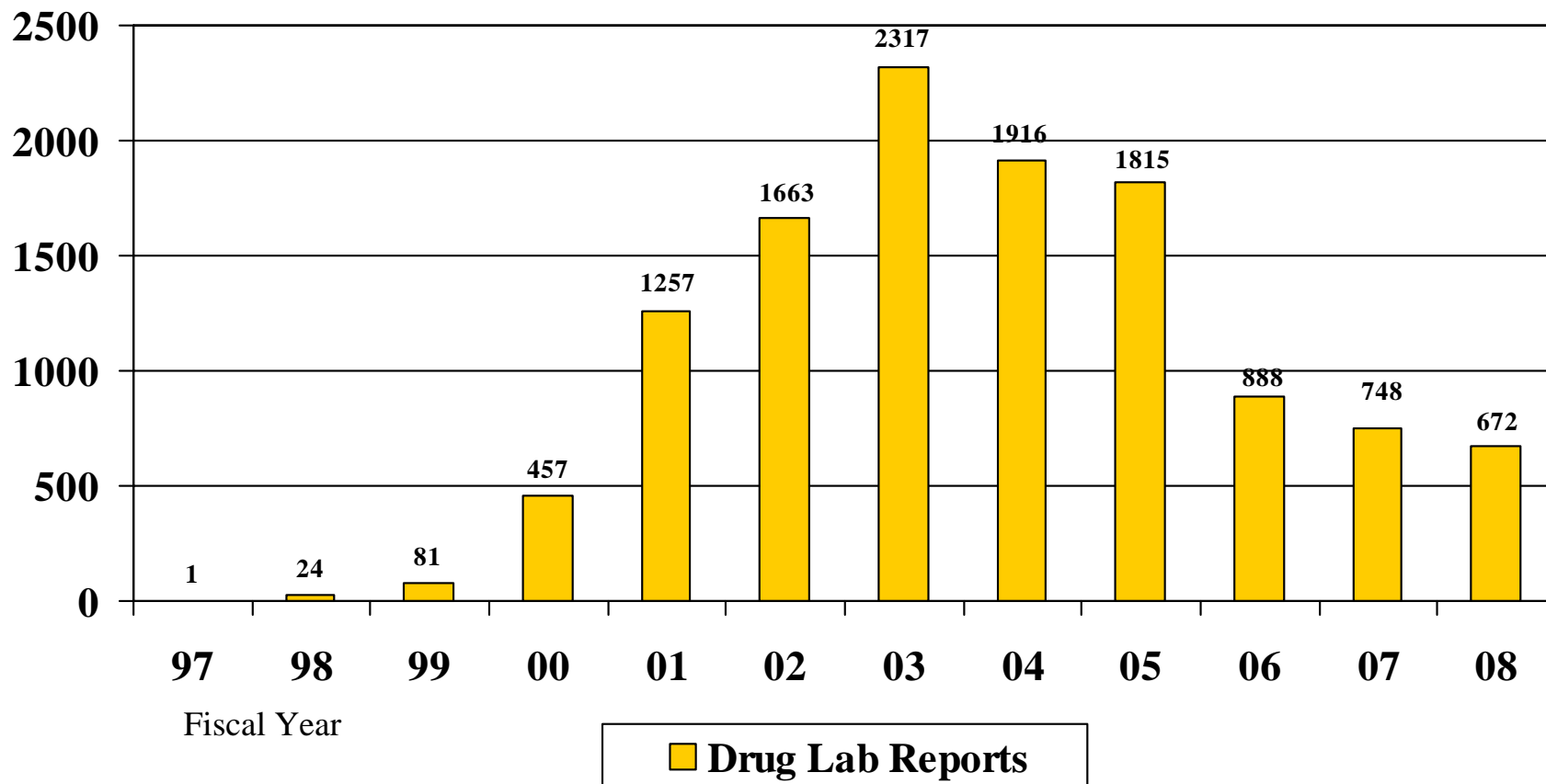
- 16-hour Field Screening for Methamphetamine Laboratories

- 6-hour Clandestine Drug Lab Collection Station Management Operations

- 6-hour Clandestine Drug Lab Collection Station Management Operations – Air Monitoring

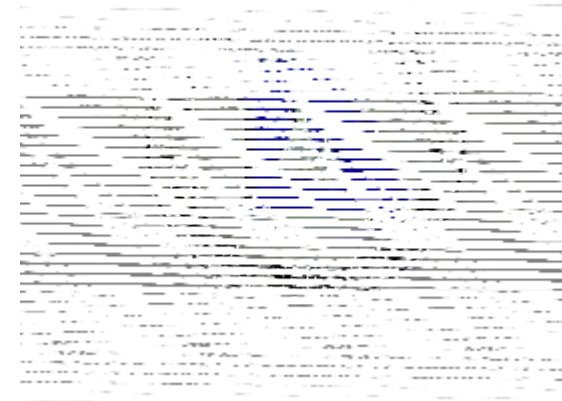
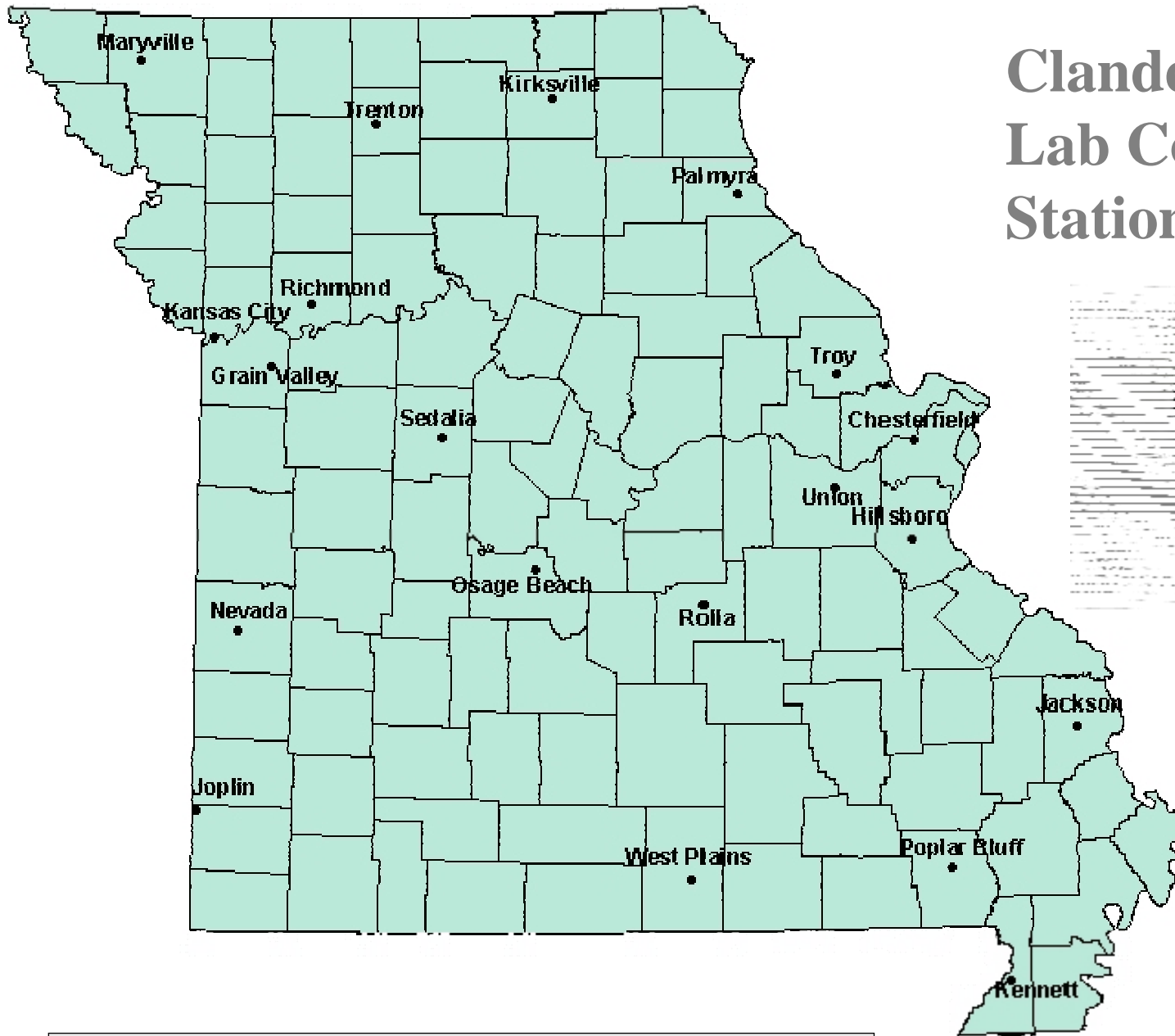


# Drug Lab Reports



The reduction in drug lab incidents is a result of Senate Bills 10 and 27 restricting access to cold medicine containing pseudoephedrine.

# Clandestine Drug Lab Collection Stations



The Nevada Clandestine Drug Lab Collection Station closed during FY 08.

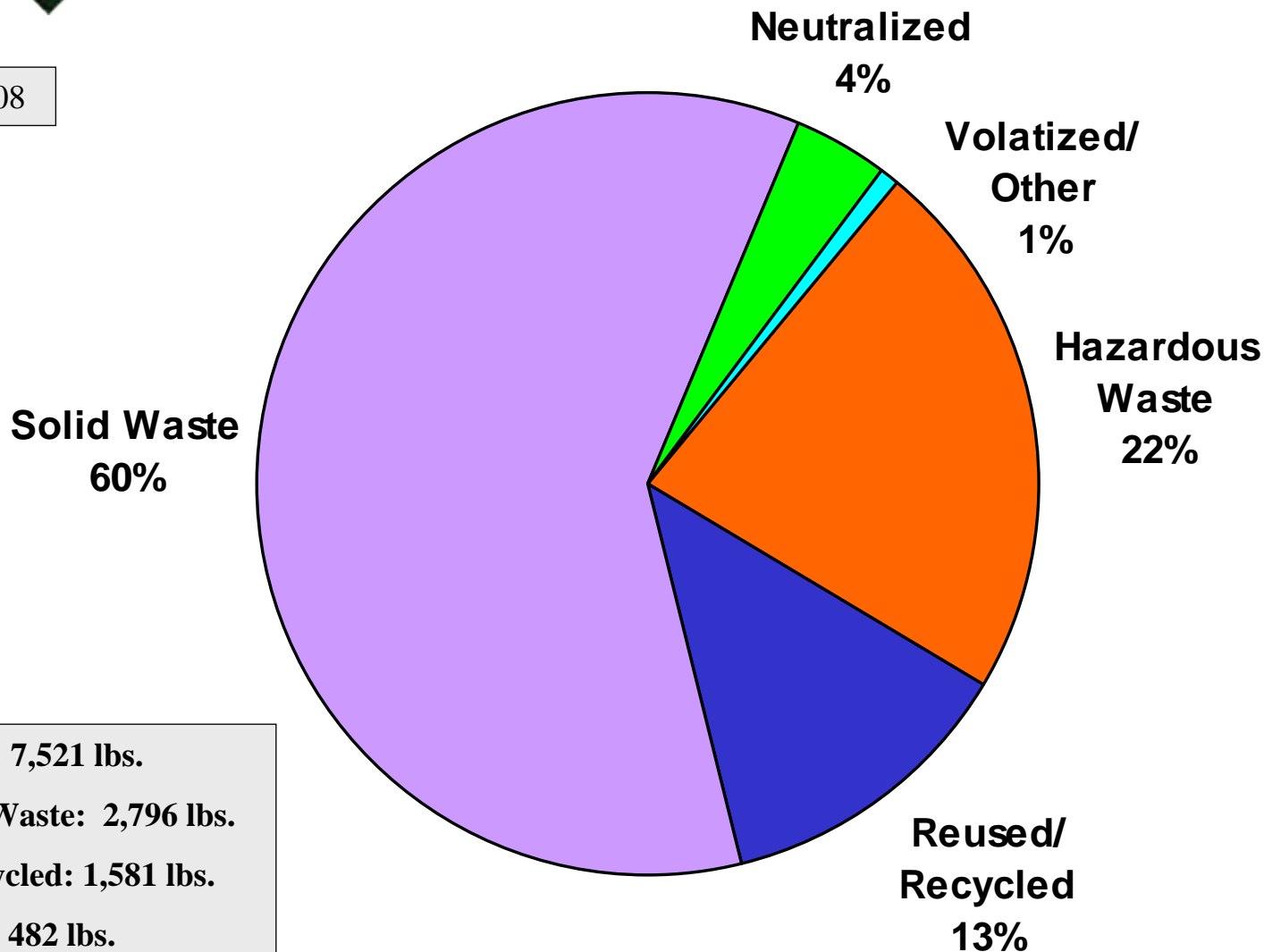


**A typical clandestine drug lab collection station operated by the Sedalia Fire Department accepts all confiscated meth lab debris from area law enforcement**



# Drug Lab Materials Processed

Fiscal Year 08



**Solid Waste: 7,521 lbs.**

**Hazardous Waste: 2,796 lbs.**

**Reused/Recycled: 1,581 lbs.**

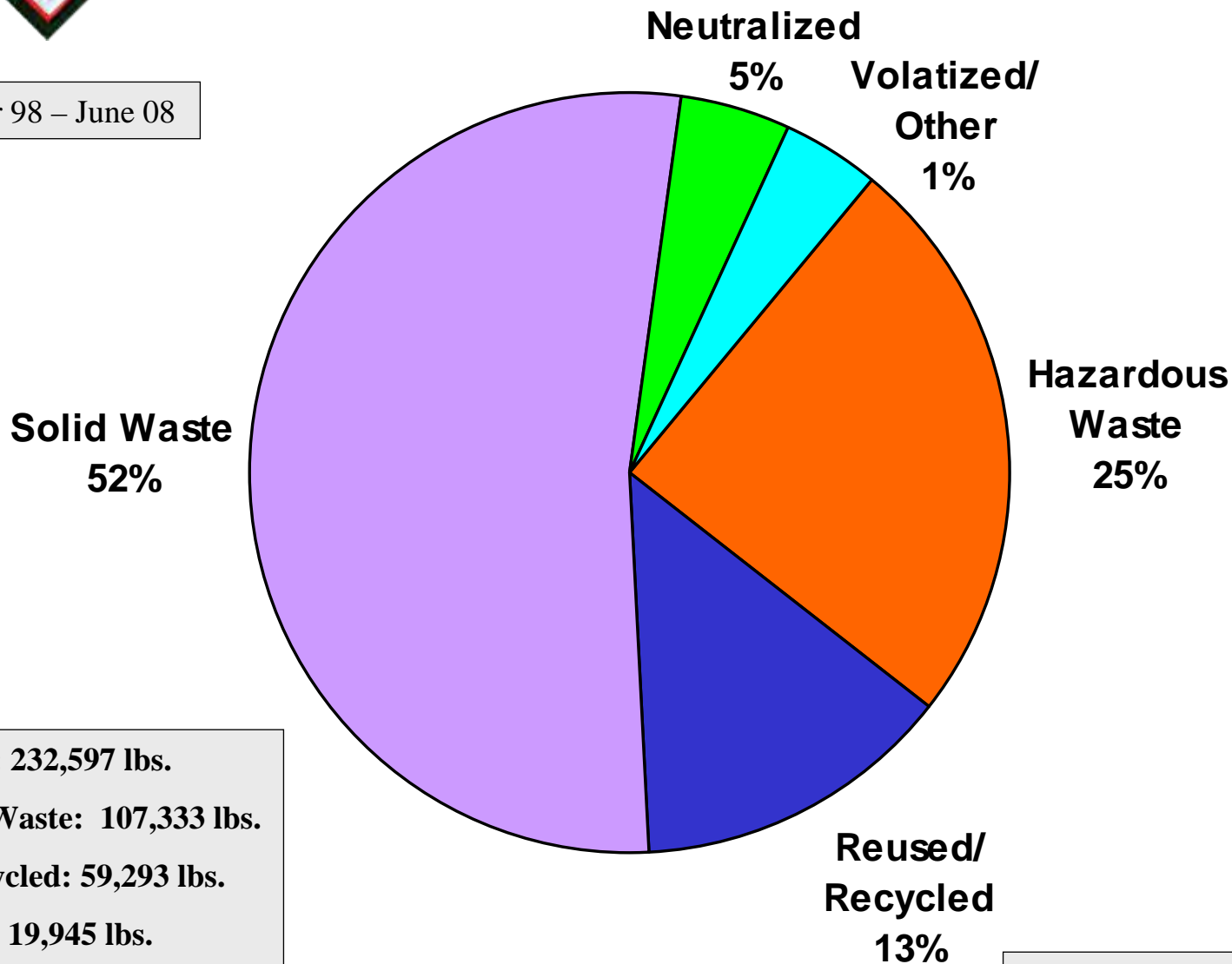
**Neutralized: 482 lbs.**

**Volatilized/Other: 98 lbs.**



October 98 – June 08

# Drug Lab Materials Processed



**Solid Waste: 232,597 lbs.**

**Hazardous Waste: 107,333 lbs.**

**Reused/Recycled: 59,293 lbs.**

**Neutralized: 19,945 lbs.**

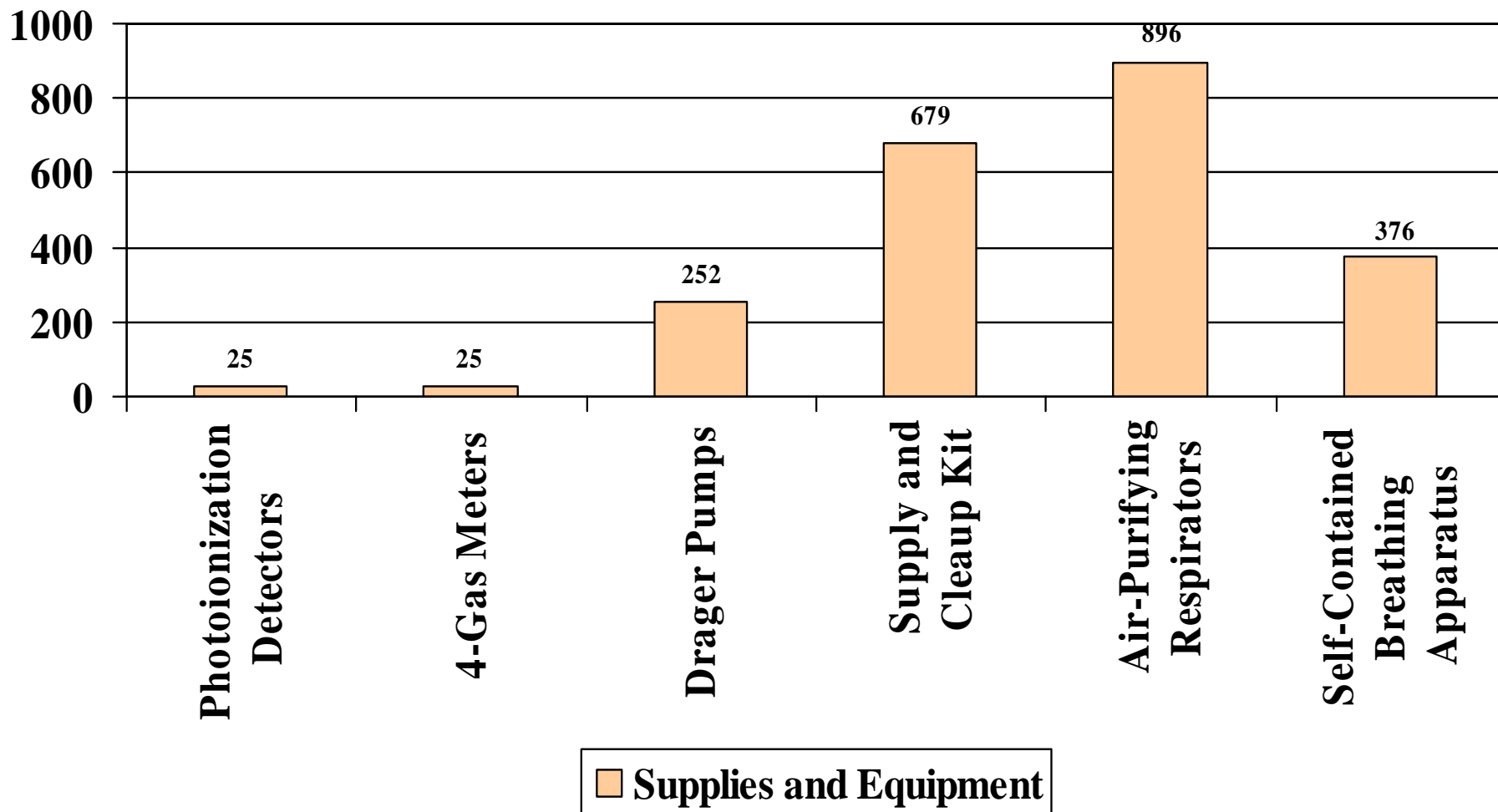
**Volatilized/Other: 18,852 lbs.**

11,303 Drug Labs Processed



# Supplies and Equipment Distribution Initiative

October 98 – June 08





**Law enforcement utilizing their personal protective equipment and air monitoring meters during a field exercise at a training course**

# Field Services Information



Environmental Emergency Response  
Field Services Section



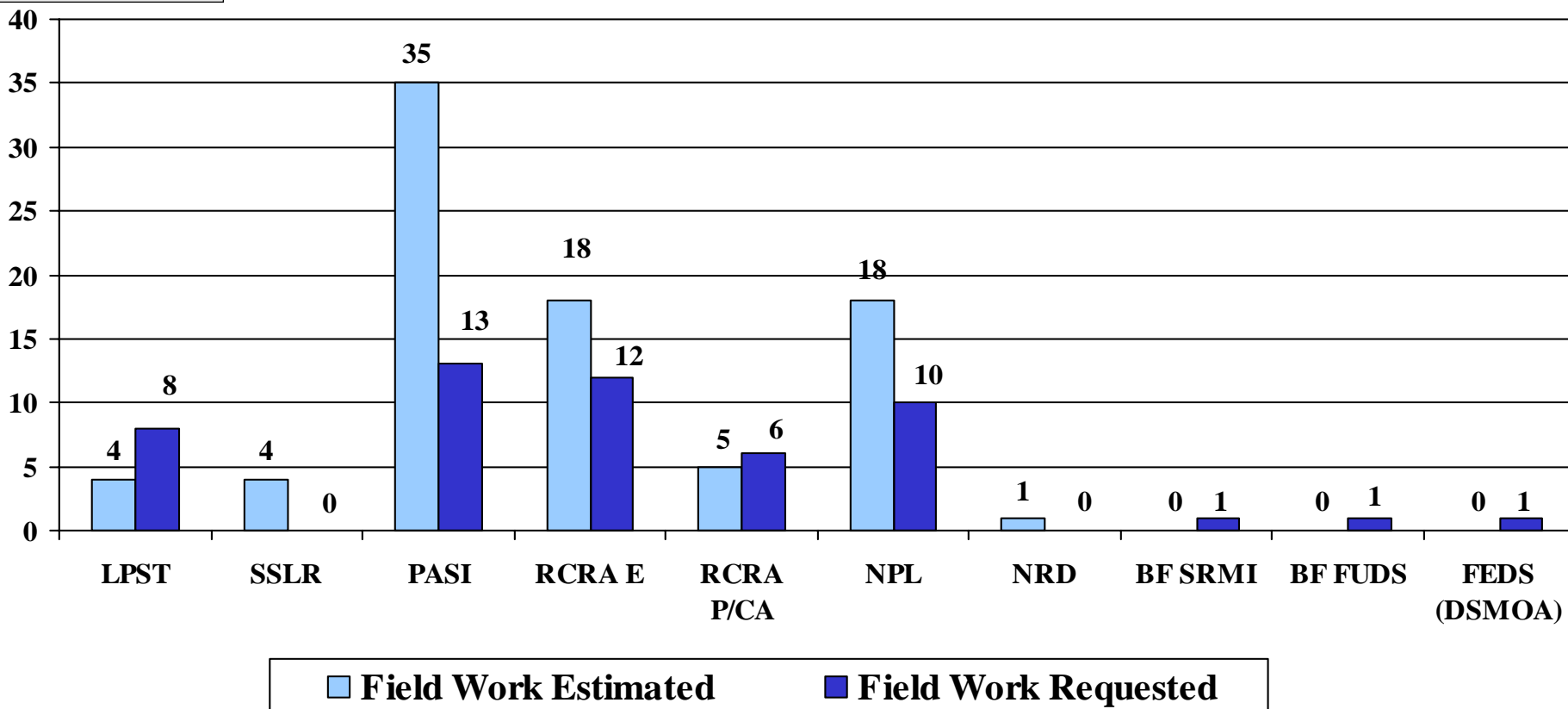
# Field Services Information

- Field Services personnel provide field support to the department's Hazardous Waste Program, which administers laws including the federal Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), federal Resource Conservation and Recovery Act (RCRA), and the Missouri Hazardous Waste Management Law and associated regulations:
  - Superfund Section – investigation abandoned or uncontrolled hazardous waste sites
  - RCRA Enforcement Section – ensures compliance by regulated industry
  - RCRA Permit Section – manages long-term cleanup efforts at regulated facilities
  - Tanks Section – investigates/oversees petroleum-related cleanups
  - Federal Facilities Section – oversees investigations/cleanup at federal installations (DOE, DOD)
- This field support includes conducting sampling investigations at known or suspected hazardous waste sites and industrial facilities that may generate or store hazardous waste. In the course of conducting these field investigations, personnel use a variety of highly specialized equipment and tools to collect and/or analyze air, water, soil, sediment, and waste samples. Most often, representative samples are collected and returned to the Environmental Services Program's State Environmental Laboratory for chemical analysis. The data generated is used by personnel within the Hazardous Waste Program to make sound decisions regarding the sites that fall within their regulatory universe.



# Hazardous Waste Investigations

Fiscal Year 08



Leaking Petroleum Storage Tanks

RCRA Enforcement

Natural Resources Damages

Federal Facilities Defense Site (Defense and State Memorandum of Agreement)

Superfund State Lead Registry

RCRA Permits/Corrective Action

Brownfields State Response and Mine Inventory

Preliminary Assessment Site Investigation

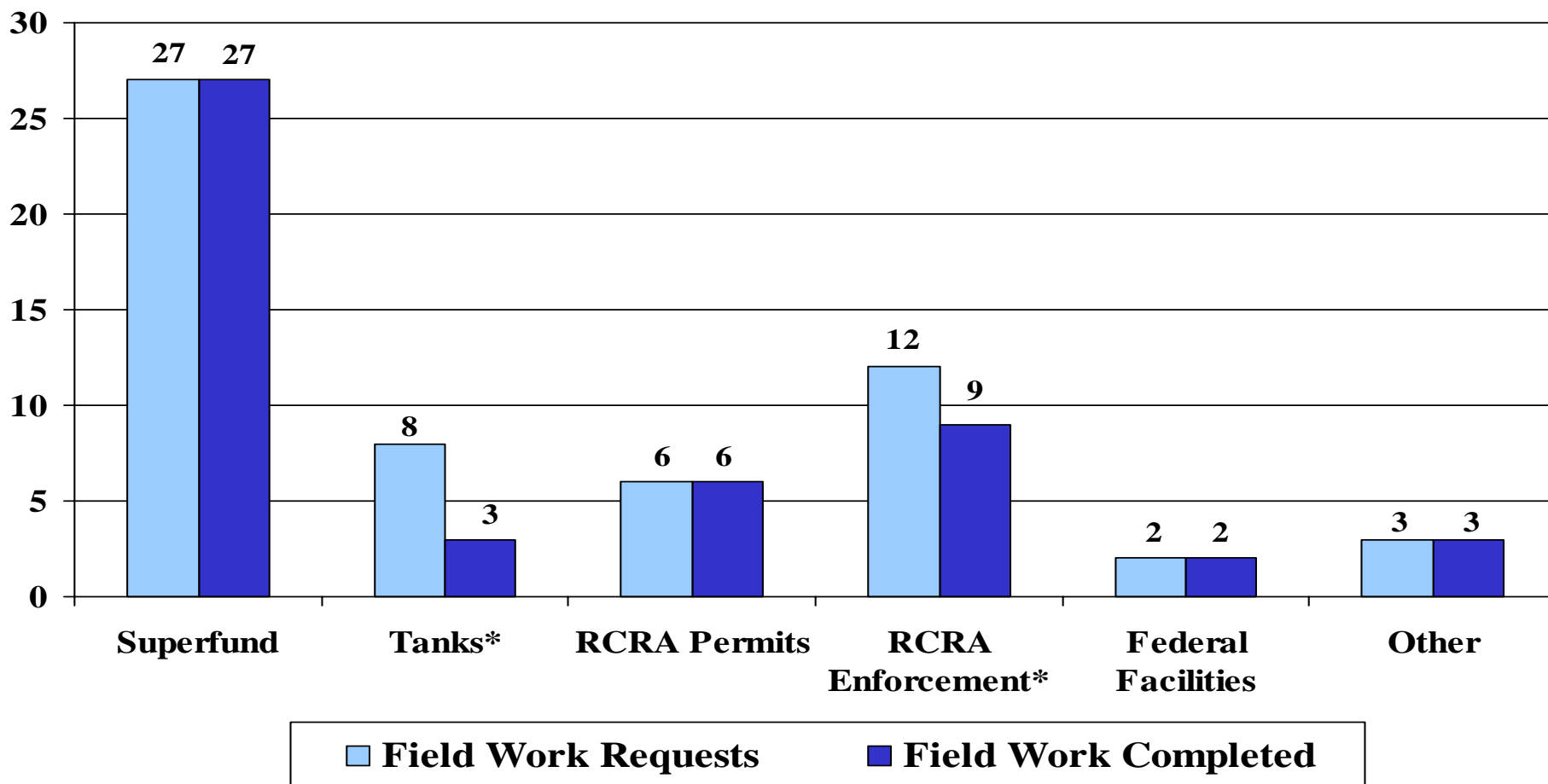
National Priorities List

Brownfields Formerly Used Defense Sites



# Hazardous Waste Investigations

Fiscal Year 08



\* The disparity between field work requests versus field work completed is due to fiscal year end reporting deadlines and personnel vacancies.



## **Dunklin County**

**A subsurface investigation is conducted searching for the source of contamination in a city drinking water supply**